

What is Claimed is:

1. A device for delivering fluid at a constant selectable flow rate comprising:
 - a housing;
 - a reservoir in said housing for containing a supply of said fluid and for delivering said fluid under pressure;
 - a primary restrictor channel and a rate selector channel each having a proximal end and a distal end, said proximal ends being in fluid communication with said reservoir; and
 - a delivery cannula in fluid communication with said distal end of said primary restrictor and selector channels for delivering said fluid;
 - said primary restrictor channel comprising a plurality of sections;
 - said rate selector channel having a plurality of nodes, each node being in fluid communication with a corresponding section of said primary restrictor channel, and capable of being closed, such that when a particular node is closed, fluid flowing from said reservoir toward said cannula may not pass through the node but rather must pass through the corresponding section of said primary restrictor channel.
2. A device as claimed in claim 1, wherein said rate selector channel has a greater cross sectional area than said primary restrictor channel.
3. A device as claimed in claim 1 wherein said primary restrictor channel is formed in a serpentine pattern.
4. A device as claimed in claim 1 further having a resealable port in fluid communication with said delivery cannula for immediate delivery of additional fluid.
5. A device as claimed in claim 1, wherein said reservoir comprises at least one spring element for pressurizing said fluid contained in said reservoir.
6. A device as claimed in claim 5, wherein said spring element is a Belleville spring.

7. A device as claimed in claim 1 wherein said primary restrictor and rate selector channels are formed into said housing.

8. A device as claimed in claim 7 wherein at least one wall of said flow channels is formed by a flexible membrane.

9. The device as claimed in claim 1 further comprising a self sealing needle port in fluid communication with said delivery cannula.

10. A method of injecting medication into a patient comprising the steps of:

providing a pressurized container of medicament in fluid communication with a proximal end of a first channel and a second channel, said first channel and said second channel each having a distal end in fluid communication with a cannula, said container having a plurality of nodes each in fluid communication with a section of said first channel and said second channel, said nodes being adapted such that when said nodes are in a closed position, fluid is not able to flow from said first channel to said second channel;

injecting said cannula into said patient;

closing a selected number of nodes;

delivering said medicament to said patient through said flow channels and said cannula at a flow rate determined by said selected number of nodes.

11. The method of claim 11, wherein said first channel has a substantially longer length and smaller cross section than said second channel.

12. The method of claim 11 wherein said providing step further comprises providing said pressurized container of medicament in a container comprising at least one flexible membrane sealed to a substantially flat surface.

13. The method of claim 13 further comprising pressurizing said medicament by flexing a spring against said container.

14. The method of claim 14 wherein said spring is a Belleville spring.
15. A device for delivering fluid at a constant flow rate comprising:
 - a housing;
 - a reservoir in said housing for containing a supply of said fluid and for delivering said fluid under pressure;
 - a primary restrictor channel having a proximal end and a distal end, said proximal end being in fluid communication with said reservoir;
 - a delivery cannula in fluid communication with said distal end of said primary restrictor channel for delivering said fluid;
 - a resealable port in fluid communication with said delivery cannula for immediate delivery of additional fluid; and
 - at least one spring element adapted to contact said reservoir upon activation of said device, and to thereby pressurize said fluid.
16. A device as claimed in claim 16, wherein said spring element is a Belleville spring.
17. A device as claimed in claim 16, wherein said resealable port is adapted to accept a needle.
18. A device as claimed in claim 16, wherein said primary restrictor channel is formed into said housing.
19. A device as claimed in claim 20, wherein at least one wall of said primary restrictor channel is formed by a flexible membrane.
20. A device as claimed in claim 16,
 - wherein said primary restrictor channel comprises a plurality of sections, and

wherein said device further comprises a rate selector channel having a proximal end in fluid communication with said reservoir and a distal end in fluid communication with said delivery cannula;

said rate selector channel having a greater cross sectional area than said primary restrictor channel, and further having a plurality of nodes, each node being in fluid communication with a corresponding section of said primary restrictor channel, and capable of being closed, such that when a particular node is closed, fluid flowing from said reservoir toward said cannula may not pass through the node but rather must pass through the corresponding section of said primary restrictor channel.

21. A device as claimed in claim 22, wherein said primary restrictor channel is formed in a serpentine pattern.

22. A device for delivering fluid at a constant flow rate comprising:

a housing;

a reservoir in said housing for containing a supply of said fluid and for delivering said fluid under pressure;

a primary restrictor channel having a proximal end and a distal end, said proximal end being in fluid communication with said reservoir;

a delivery cannula in fluid communication with said distal end of said primary restrictor channel for delivering said fluid;

a bolus restrictor channel having a proximal end in fluid communication with said reservoir, and a distal end in fluid communication with a bolus button; and

a bolus exit channel having a proximal end in fluid communication with said bolus button, a distal end in fluid communication with said delivery cannula, and a spring check valve adapted to prevent said fluid from flowing toward said bolus button and further adapted to allow said fluid to flow toward said delivery cannula only if a minimum pressure is exceeded;

wherein said bolus button is adapted to have a maximum volume, and is further adapted to be collapsed, causing fluid to flow through said spring check valve to said delivery cannula.

23. A device as claimed in claim 24 wherein said bolus restrictor channel further comprises a check valve adapted to prevent the flow of fluid toward said reservoir.
24. A device as claimed in claim 24, wherein said bolus restrictor channel further comprises a flow restrictor adapted to restrict the flow of fluid through said bolus restrictor channel.